

**CLAIMS:**

What is claimed is:

1. A method within an electronic device for  
2 communicating within a network of localized electronic  
3 devices, wherein said method comprises the steps of:

4 processing incoming and outgoing vibration wave  
5 messages in accordance with a network protocol; and

6 decoding a message-specific semantic of an incoming  
7 vibration wave message and encoding a message-specific  
8 semantic of an outgoing vibration wave message, such that  
9 said device may correspond in accordance with device-  
10 specific and message specific limitations.

1. The method of claim 1, wherein said processing step  
2 further comprises the steps of:

3 decoding said incoming vibration wave message; and

4 encoding said outgoing vibration wave message in  
5 accordance with said network protocol.

1. The method of claim 1, further comprising the step of  
2 receiving and translating said incoming vibration wave  
3 message into a digitized electronic signal.

1. The method of claim 3, wherein all network messages  
2 include a control message, and wherein said method further  
3 comprises the steps of:

1               reading said digitized electronic signal to identify  
2               said control message;

3               terminating said digitized electronic signal in  
4               response to failing to identify said control message; and

5               processing said digitized electronic signal in  
6               response to identifying said control message.

1       5.   The method of claim 2, wherein said encoding step is  
2               followed by the step of generating and transmitting an  
3               outgoing vibration wave message in accordance with said  
4               network protocol.  
5  
6  
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1       6.   The method of claim 5, wherein said generating and  
2               transmitting step further comprises the steps of:

1               3       translating a digital signal from said protocol  
2               4       interface macro into an analog signal; and  
3  
4  
5

6               6       converting said translated analog signal into an  
7               7       outgoing vibration wave message.

1       7.   The method of claim 1, wherein said device includes a  
2               base media interface having an vibration signal table  
3               which stores a plurality of predetermined vibration wave  
4               signals, and wherein method further comprises encoding  
5               said outgoing vibration wave message utilizing at least  
6               one of said plurality of predetermined vibration wave  
7               signals within said vibration signal table.

1       8. An electronic device comprising:

2              a base media interface within each of said plurality  
3              of devices for processing incoming and outgoing vibration  
4              wave messages in accordance with a network protocol; and

5              a device-specific logic in communication with said  
6              base media interface for decoding a message-specific  
7              semantic of an incoming vibration wave message and  
8              encoding a message-specific semantic of an outgoing  
9              vibration wave message, such that each of said plurality  
10             of devices may correspond in accordance with device-  
11             specific and message specific limitations.

1       9. The communication interface of claim 8, wherein said  
2              base media interface comprises a protocol interface macro  
3              for decoding said incoming vibration wave message and  
4              encoding said outgoing vibration wave message in  
5              accordance with said network protocol.

1       10. The communication interface of claim 9, wherein said  
2              base media interface further comprises a transducer for  
3              receiving and translating said incoming vibration wave  
4              message into an electronic signal.

1       11. The communication interface of claim 10, wherein said  
2              base media interface further comprises an analog-to-  
3              digital converter for digitizing said electronic signal.

1       12. The communication interface of claim 9, wherein said  
2              base media interface further comprises a vibration encoder  
3              in communication with said protocol interface macro for

1 generating and transmitting an outgoing vibration wave  
2 message in accordance with said network protocol.

1 13. The communication interface of claim 12, wherein said  
2 vibration encoder comprises:

3 a digital-to-analog converter for converting a  
4 vibration-encoded digital signal from said protocol  
5 interface macro into an vibration-encoded analog signal;  
6 and

7 a speaker for translating said vibration-encoded  
8 analog signal into an outgoing vibration wave message.

10 14. The communication interface of claim 8, wherein said  
11 base media interface includes a message table which stores  
12 a plurality of predetermined vibration wave signals.

13 15. The communication interface of claim 14, wherein said  
14 device-specific logic encodes said outgoing vibration wave  
15 message utilizing at least one of said plurality of  
16 predetermined vibration wave signals within said vibration  
17 signal table.

1 16. The communication interface of claim 14, wherein said  
2 base media interface further comprises computer processing  
3 means that provides interactive processing among said  
4 protocol interface macro, said vibration signal table, and  
5 said device-specific logic.

1 17. The communication interface of claim 16, further  
2 comprising a non-vibration feedback source in

1 communication with said computer processing means for  
2 providing external non-vibration feedback control of said  
3 outgoing vibration wave message.

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1           18. A method for processing a communication message with  
2 another device, said method comprising the steps of:

3                 transducing an incoming vibration signal into an  
4 incoming electronic signal;

5                 decoding said incoming electronic signal to determine  
6 whether said incoming vibration signal is a network  
7 message;

8                 responsive to a determination that said incoming  
9 vibration signal is not a network message, terminating  
10 said incoming electronic signal;

11                 responsive to a determination that said incoming  
12 vibration signal is an incoming network message,  
13 determining whether said incoming network message has been  
14 previously received by said host device;

15                 responsive to a determination that said incoming  
16 vibration signal has been previously received by said host  
17 device, terminating said incoming network message; and

18                 responsive to a determination that said incoming  
19 vibration signal has not been previously received by said  
20 host device, transmitting said incoming network message as  
21 an outgoing vibration message.

1           19. The method of claim 18, further comprising the steps  
2 of decoding a semantic of said incoming network message  
3 into a device-specific command in accordance with a

1 device-specific decoder and device-specific instructions  
2 stored within said device-specific logic module.

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